

Title (en)

Method of reducing steering instability in hydraulic power steering systems

Title (de)

Verfahren zur Reduktion der Lenkinstabilität in hydraulischen Leistungslenkssystemen

Title (fr)

Procédé de réduction de l'instabilité de direction dans des systèmes de direction assistée hydraulique

Publication

**EP 2161180 B1 20110803 (EN)**

Application

**EP 09168507 A 20090824**

Priority

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- US 54206709 A 20090817

Abstract (en)

[origin: EP2161180A2] A method for reducing steering instability in a hydraulic power steering system (10) for a vehicle having a pair of cylinder lines (50, 52) through which hydraulic fluid is conveyed in assisting turning a vehicle wheel (26, 28, 36), including the steps of determining which (68, 68') of said pair of cylinder lines (50, 52) results in less steering instability when the vehicle wheel (26, 28, 36) is turned; calculating the fluid inertance of the hydraulic fluid conveyed through the cylinder line (68, 68') that results in less steering instability; and altering at least one dimension (L2, L2', D1) of the cylinder line (70, 70') that results in greater steering instability when the vehicle wheel (26, 28, 36) is turned to substantially match the fluid inertance thereof to the calculated fluid inertance.

IPC 8 full level

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